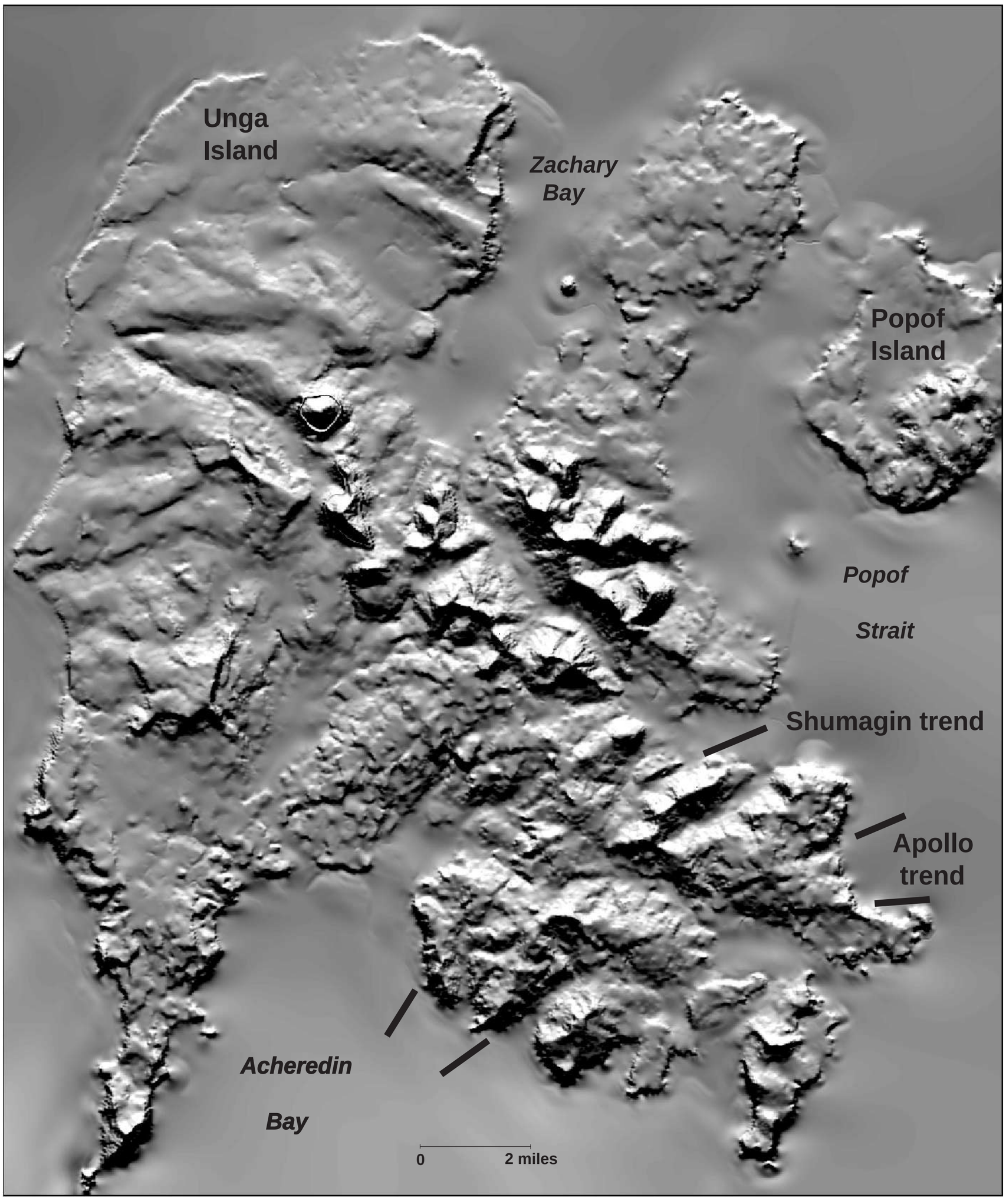
Unga
Island
Zachary
Bay
Popof
Island
Popof
Strait
Shumagin trend
Apollo
trend
Acheredin
Bay
0
2 miles

Shaded map

Hillshaded image of Unga Island and, at the upper right, northwestern Popof Island. The image is a computer rendering of the land surface as it would appear if illuminated by a sun at 45 degrees above the horizon, shining from the northwest (upper left). Northwestern Unga Island is underlain by the homoclinally NW-dipping, Miocene Unga Formation (smooth topography). Northeastern Unga Island and northwestern Popof Island are underlain by flat-lying andesitic lava flows of the Oligocene Popof volcanic rocks. The prominent hill near the center of Unga Island is a Miocene dome encircled by carapace breccia and tuff; the encircling escarpment is artificially enhanced by the imaging process. The subcircular area of rugged topography, which extends from the center of Unga Island to the east shore, is underlain by high-silica andesitic lava flows and intrusive sills and domes. Low terrain in southeastern Unga Island is underlain by lava flows and tuff of the Popof volcanic rocks, while most of the prominent peaks are shallow intrusive domes. Southeastern Unga Island is also cut by east- to northeast-trending topographic lineaments. Two of these--the Apollo and Shumagin trends--extend across the full width of the island and have localized gold and silver mineralization. These two important trends are marked by lines at their ends; the Apollo trend bifurcates near the eastern coast of Unga Island. Other northeast-trending lineaments can be seen between the Shumagin lineament and the high peaks at the center of the island. (Image created from a digital elevation model that was constructed for this study and subsampled in 30-m horizontal cells.)